

User's Guide

SB16 PCI

Information in this document is subject to change without notice and does not represent a commitment on the part of Creative Technology Ltd. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, for any purpose without the written permission of Creative Technology Ltd. The software described in this document is furnished under a license agreement and may be used or copied only in accordance with the terms of the license agreement. It is against the law to copy the software on any other medium except as specifically allowed in the license agreement. The licensee may make one copy of the software for backup purposes.

Copyright © 1999 Creative Technology Ltd. All rights reserved.

Version 2.0

March 2000

Trademarks

Sound Blaster is a registered trademark, and Blaster is a trademark of Creative Technology Ltd.

Intel and Pentium are registered trademarks of Intel Corporation.

Microsoft, MS-DOS, Windows, and the Windows logo are registered trademarks of Microsoft Corporation.

All other products are trademarks or registered trademarks of their respective owners.

This card is covered by one or more of the following U.S. patents:

4,404,529; 4,506,579; 4,699,038; 4,987,600; 5,013,105; 5,072,645; 5,111,727; 5,144,676; 5,170,369; 5,248,845; 5,298,671; 5,303,309; 5,317,104; 5,342,990; 5,790,837.

Creative End-User Software License Agreement **Version 2.3, January 2000**

PLEASE READ THIS DOCUMENT CAREFULLY BEFORE INSTALLING THE SOFTWARE. BY INSTALLING AND USING THE SOFTWARE, YOU AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, DO NOT INSTALL OR USE THE SOFTWARE. PROMPTLY RETURN, WITHIN 15 DAYS, THE SOFTWARE, ALL RELATED DOCUMENTATION AND ACCOMPANYING ITEMS TO THE PLACE OF ACQUISITION FOR A FULL REFUND.

This is a legal agreement between you and **Creative Technology Ltd.** and its subsidiaries ("Creative").

This Agreement states the terms and conditions upon which Creative offers to license the software sealed in the disk package together with all related documentation and accompanying items including, but not limited to, the executable programs, drivers, libraries and data files associated with such programs (collectively, the "Software").

LICENSE

1. Grant of License

The Software is licensed, not sold, to you for use only under the terms of this Agreement. You own the disk or other media on which the Software is originally or subsequently recorded or fixed; but, as between you and Creative (and, to the extent applicable, its licensors), Creative retains all title to and ownership of the Software and reserves all rights not expressly granted to you.

2. For Use on a Single Computer

The Software may be used only on a single computer by a single user at any time. You may transfer the machine-readable portion of the Software from one computer to another computer, provided that (a) the Software (including any portion or copy thereof) is erased from the first computer and (b) there is no

possibility that the Software will be used on more than one computer at a time.

3. Stand-Alone Basis

You may use the Software only on a stand-alone basis, such that the Software and the functions it provides are accessible only to persons who are physically present at the location of the computer on which the Software is loaded. You may not allow the Software or its functions to be accessed remotely, or transmit all or any portion of the Software through any network or communication line.

4. Copyright

The Software is owned by Creative and is protected by United States copyright laws and international treaty provisions. You may not remove the copyright notice from any copy of the Software or any copy of the written materials, if any, accompanying the Software.

5. One Archival Copy

You may make one (1) archival copy of the machine-readable portion of the Software for backup purposes only in support of your use of the Software on a single computer, provided that you reproduce on the copy all copyright and other proprietary rights notices included on the originals of the Software.

6. No Merger or Integration

You may not merge any portion of the Software into, or integrate any portion of the Software with, any other program, except to the extent expressly permitted by the laws of the jurisdiction where you are located. Any portion of the Software merged into or integrated with another program, if any, will continue to be subject to the terms and conditions of this Agreement, and you must reproduce on the merged or integrated portion all copyright and other proprietary rights notices included in the originals of the Software.

7. Network Version

If you have purchased a "network" version of the Software, this Agreement applies to the installation of the Software on a single "file server". It may not be copied onto multiple systems. Each "node" connected to the "file server" must also have its own license of a "node copy" of the Software, which becomes a license only for that specific "node".

8. Transfer of License

You may transfer your license of the Software, provided that (a) you transfer all portions of the Software or copies thereof, (b) you do not retain any portion of the Software or any copy thereof, and (c) the transferee reads and agrees to be

bound by the terms and conditions of this Agreement.

9. Limitations on Using, Copying, and Modifying the Software

Except to the extent expressly permitted by this Agreement or by the laws of the jurisdiction where you acquired the Software, you may not use, copy or modify the Software. Nor may you sub-license any of your rights under this Agreement. You may use the software for your personal use only, and not for public performance or for the creation of publicly displayed videotapes.

10. Decompiling, Disassembling, or Reverse Engineering

You acknowledge that the Software contains trade secrets and other proprietary information of Creative and its licensors. Except to the extent expressly permitted by this Agreement or by the laws of the jurisdiction where you are located, you may not decompile, disassemble or otherwise reverse engineer the Software, or engage in any other activities to obtain underlying information that is not visible to the user in connection with normal use of the Software.

In particular, you agree not for any purpose to transmit the Software or display the Software's object code on any computer screen or to make any hardcopy memory dumps of the Software's object code. If you believe you require information related to the interoperability of the Software with other programs, you shall not decompile or disassemble the Software to obtain such information, and you agree to request such

information from Creative at the address listed below. Upon receiving such a request, Creative shall determine whether you require such information for a legitimate purpose and, if so, Creative will provide such information to you within a reasonable time and on reasonable conditions.

In any event, you will notify Creative of any information derived from reverse engineering or such other activities, and the results thereof will constitute the confidential information of Creative that may be used only in connection with the Software.

TERMINATION

The license granted to you is effective until terminated. You may terminate it at any time by returning the Software (including any portions or copies thereof) to Creative. The license will also terminate automatically without any notice from Creative if you fail to comply with any term or condition of this Agreement. You agree upon such termination to return the Software (including any portions or copies thereof) to Creative. Upon termination, Creative may also enforce any rights provided by law. The provisions of this Agreement that protect the proprietary rights of Creative will continue in force after termination.

LIMITED WARRANTY

Creative warrants, as the sole warranty, that the disks on which the Software is furnished will be free of defects, as set forth in the Warranty Card or printed manual included with the Software. No distributor, dealer or any other entity or person is authorized to expand or alter this warranty or any

other provisions of this Agreement. Any representation, other than the warranties set forth in this Agreement, will not bind Creative.

Creative does not warrant that the functions contained in the Software will meet your requirements or that the operation of the Software will be uninterrupted, error-free or free from malicious code. For purposes of this paragraph, "malicious code" means any program code designed to contaminate other computer programs or computer data, consume computer resources, modify, destroy, record, or transmit data, or in some other fashion usurp the normal operation of the computer, computer system, or computer network, including viruses, Trojan horses, droppers, worms, logic bombs, and the like. **EXCEPT AS STATED ABOVE IN THIS AGREEMENT, THE SOFTWARE IS PROVIDED AS-IS WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE. CREATIVE IS NOT OBLIGATED TO PROVIDE ANY UPDATES, UPGRADES OR TECHNICAL SUPPORT FOR THE SOFTWARE.**

Further, Creative shall not be liable for the accuracy of any information provided by Creative or third-party technical support personnel, or any damages caused, either directly or indirectly, by acts taken or omissions made by you as a result of such technical support.

You assume full responsibility for the selection of the Software to achieve your intended results, and

for the installation, use and results obtained from the Software. You also assume the entire risk as it applies to the quality and performance of the Software. Should the Software prove defective, you (and not Creative, or its distributors or dealers) assume the entire cost of all necessary servicing, repair or correction.

This warranty gives you specific legal rights, and you may also have other rights which vary from country/state to country/state. Some countries/states do not allow the exclusion of implied warranties, so the above exclusion may not apply to you. Creative disclaims all warranties of any kind if the Software was customized, repackaged or altered in any way by any third party other than Creative.

LIMITATION OF REMEDIES AND DAMAGES

THE ONLY REMEDY FOR BREACH OF WARRANTY WILL BE THAT SET FORTH IN THE WARRANTY CARD OR PRINTED MANUAL INCLUDED WITH THE SOFTWARE. IN NO EVENT WILL CREATIVE OR ITS LICENSORS BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES OR FOR ANY LOST PROFITS, LOST SAVINGS, LOST REVENUES OR LOST DATA ARISING FROM OR RELATING TO THE SOFTWARE OR THIS AGREEMENT, EVEN IF CREATIVE OR ITS LICENSORS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT WILL CREATIVE'S LIABILITY OR DAMAGES TO YOU OR ANY OTHER

PERSON EVER EXCEED THE AMOUNT PAID BY YOU TO USE THE SOFTWARE, REGARDLESS OF THE FORM OF THE CLAIM. Some countries/states do not allow the limitation or exclusion of liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you.

PRODUCT RETURNS

If you must ship the software to Creative or an authorized Creative distributor or dealer, you must prepay shipping and either insure the software or assume all risk of loss or damage in transit

U.S. GOVERNMENT RESTRICTED RIGHTS

All Software and related documentation are provided with restricted rights. Use, duplication or disclosure by the U.S. Government is subject to restrictions as set forth in subdivision (b)(3)(ii) of the Rights in Technical Data and Computer Software Clause at 252.227-7013. If you are sub-licensing or using the Software outside of the United States, you will comply with the applicable local laws of your country, U.S. export control law, and the English version of this Agreement.

CONTRACTOR/MANUFACTURER

The Contractor/Manufacturer for the Software is:

Creative Technology Ltd

31, International Business Park
Creative Resource
Singapore 609921

GENERAL

This Agreement is binding on you as well as your employees, employers, contractors and agents, and on any successors and assignees. Neither the Software nor any information derived therefrom

may be exported except in accordance with the laws of the U.S. or other applicable provisions. This Agreement is governed by the laws of the State of California (except to the extent federal law governs copyrights and federally registered trademarks). This Agreement is the entire agreement between us and supersedes any other understandings or agreements, including, but not limited to, advertising, with respect to the Software. If any provision of this Agreement is deemed invalid or unenforceable by any country or government agency having jurisdiction, that particular provision will be deemed modified to the extent necessary to make the provision valid and enforceable, and the remaining provisions will remain in full force and effect. For questions concerning this Agreement, please contact Creative at the address stated above. For questions on product or technical matters, contact the Creative technical support center nearest you.

ADDENDUM TO THE MICROSOFT SOFTWARE LICENSE AGREEMENT (WINDOWS 95)

IMPORTANT: By using the Microsoft software files (the "Microsoft Software") provided with this Addendum, you are agreeing to be bound by the following terms. If you do not agree to be bound by these terms, you may not use the Microsoft Software.

The Microsoft Software is provided for the sole purpose of replacing the corresponding files provided with a previously licensed copy of the Microsoft software product identified above ("ORIGINAL PRODUCT"). Upon installation, the Microsoft Software files become part of the

ORIGINAL PRODUCT and are subject to the same warranty and license terms and conditions as the ORIGINAL PRODUCT. If you do not have a valid license to use the ORIGINAL PRODUCT, you may not use the Microsoft Software. Any other use of the Microsoft Software is prohibited.

SPECIAL PROVISIONS APPLICABLE TO THE EUROPEAN UNION

IF YOU ACQUIRED THE SOFTWARE IN THE EUROPEAN UNION (EU), THE FOLLOWING PROVISIONS ALSO APPLY TO YOU. IF THERE IS ANY INCONSISTENCY BETWEEN THE TERMS OF THE SOFTWARE LICENSE AGREEMENT SET OUT EARLIER AND IN THE FOLLOWING PROVISIONS, THE FOLLOWING PROVISIONS SHALL TAKE PRECEDENCE.

DECOMPILATION

You agree not for any purpose to transmit the Software or display the Software's object code on any computer screen or to make any hard copy memory dumps of the Software's object code. If you believe you require information related to the interoperability of the Software with other programs, you shall not decompile or disassemble the Software to obtain such information, and you agree to request such information from Creative at the address listed earlier. Upon receiving such a request, Creative shall determine whether you require such information for a legitimate purpose and, if so, Creative will provide such information to you within a reasonable time and on reasonable conditions.

LIMITED WARRANTY

EXCEPT AS STATED EARLIER IN THIS AGREEMENT, AND AS PROVIDED UNDER THE HEADING "STATUTORY RIGHTS", THE SOFTWARE IS PROVIDED AS-IS WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, QUALITY AND FITNESS FOR A PARTICULAR PURPOSE.

LIMITATION OF REMEDY AND DAMAGES
THE LIMITATIONS OF REMEDIES AND DAMAGES IN THE SOFTWARE LICENSE AGREEMENT SHALL NOT APPLY TO PERSONAL INJURY (INCLUDING DEATH) TO ANY PERSON CAUSED BY CREATIVE'S NEGLIGENCE AND ARE SUBJECT TO THE PROVISION SET OUT UNDER THE HEADING "STATUTORY RIGHTS".

STATUTORY RIGHTS

Irish law provides that certain conditions and warranties may be implied in contracts for the sale of goods and in contracts for the supply of services. Such conditions and warranties are hereby excluded, to the extent such exclusion, in the context of this transaction, is lawful under Irish law. Conversely, such conditions and warranties, insofar as they may not be lawfully excluded, shall apply.

Accordingly nothing in this Agreement shall prejudice any rights that you may enjoy by virtue of Sections 12, 13, 14 or 15 of the Irish Sale of Goods Act 1893 (as amended).

GENERAL

This Agreement is governed by the laws of the

Republic of Ireland. The local language version of this agreement shall apply to Software acquired in the EU. This Agreement is the entire agreement between us, and you agree that Creative will not have any liability for any untrue statement or representation made by it, its agents or anyone else (whether innocently or negligently) upon which you relied upon entering this Agreement, unless such untrue statement or representation was made fraudulently.

Safety Information

The following sections contain notices for various countries:

CAUTION: This device is intended to be installed by the user in a CSA/TUV/UL certified/listed IBM AT or compatible personal computers in the manufacturer's defined operator access area. Check the equipment operating/installation manual and/or with the equipment manufacturer to verify/confirm if your equipment is suitable for user-installed application cards.

Modifications

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the device.

Compliance

This product conforms to the following Council Directive:

- Directive 89/336/EEC, 92/31/EEC (EMC)

Contents

Introduction

Checking System Requirements	2
Using This Guide	2
Getting More Information	2
Document Conventions	2
Preliminary Step for Windows 95 Users.....	3
On the Audio Card	4
To Install the Card and Related Hardware	4
To Install Software in Windows 95/98.....	5
To Install Audio Drivers	5
To Install Applications.....	6
To Test the Installation.....	7
To Uninstall Sound Blaster 16 PCI.....	8
To Install Software in Windows NT 4.0	8
To Install Audio Drivers	8
To Test the Installation.....	8
To Uninstall Sound Blaster 16 PCI.....	9
To Reinstall the Audio Drivers From the Installation Disc	9
A Windows NT 4.0 Service Control Manager error message appears.....	9
Applications.....	10
Creative Mixer	10
Creative WaveStudio	11
Soundo'LE (for Windows 95/98 only).....	11
Creative Keytar	11
General Specifications	12

Introduction

Congratulations on your purchase of Creative Sound Blaster™ 16 PCI audio card. With its high-quality performance and low CPU utilization, Sound Blaster 16 PCI is the ideal choice for your personal computer.

Featuring 128-voice wave-table synthesis with very high sample rate converters, Sound Blaster 16 PCI ensures a high level of audio quality and performance. In addition, Sound Blaster 16 PCI supports localized three-dimensional sound immersion in headphone and two-speaker environments.

Sound Blaster 16 PCI also supports multiple algorithm levels of reverb and chorus effects on the wave-table sounds as well as spatial sound enhancement on MIDI and Wave sounds in two speakers. Full duplex operation also allows simultaneous audio recording and playback.

Sound Blaster 16 PCI's compatibility with Sound Blaster PCI ensures you of near perfect Sound Blaster compatibility on legacy applications.

Its use of the PCI bus and Plug and Play (PnP) technology helps make the Sound Blaster 16 PCI one of the easiest audio cards to install. We believe this Sound Blaster 16 PCI card will give you years of enjoyment of high-quality sound on your PC.

Checking System Requirements

Using This Guide

Getting More Information

Document Conventions


Your audio card requires at least:

- ☐ Pentium class 90MHz or 166MHz (recommended) computer with a free PCI slot
- ☐ 16 MB RAM (32 RAM recommended)
- ☐ Windows NT 4.0 or Windows 95/98
- ☐ Headphone or amplified speakers (Cambridge SoundWorks speakers recommended)


This guide explains the various hardware components on your audio card, and shows you how to install the card into your computer.

Refer to the online *Creative Audio Software User's Guide* for more information and instructions on how to use the various applications found in your package.

The following conventions are used throughout this document:

This	Represents
bold	Text that must be entered exactly as it appears.
<i>italic</i>	<i>Title of a book or a placeholder, which represents the information you must provide.</i>
UPPERCASE	DIRECTORY NAME, FILE NAME, OR ACRONYM.
< >	Symbols, letters, and key names on the keyboard.
	The notepad icon indicates information that is of particular importance and should be considered before continuing.

Preliminary Step for Windows 95 Users

This	Represents
	The alarm clock designates a caution or warning that can help you avoid situations involving risk.

If you are using Windows 95, you need to find your Windows' version number before you can proceed to the section "To Install Software in Windows 95/98" on page 5.

To find your Windows' version number:

1. Switch on your computer.
2. Click the Start button, point to Settings, and then click Control Panel.
3. In the Control Panel window, double-click the System icon.
Your Windows 95 version number is displayed in the General tabbed page of the Systems Properties dialog box.
4. Note the version number.

The following are possible Windows 95 version numbers:

- ☐ 4.00.950
- ☐ 4.00.950A
- ☐ 4.00.950B
- ☐ 4.00.950C

On the Audio Card



Jacks are one-hole connecting interfaces whereas connectors are multi-pin interfaces.

Your audio card has these jacks and connectors which allow you to attach other devices:

Line In jack (Blue)

Connects external devices such as cassette, DAT, or MiniDisc player for playback and recording.

Microphone In jack (Red)

Connects an external microphone for voice input.

Line Out jack (Green)

Connects headphones, powered speakers and an external amplifier.

Speaker Out jack (Black)

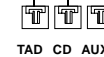
Connects headphones and non-powered speakers for audio output.

Joystick/MIDI connector

Connects a joystick or a MIDI device. You can buy an optional MIDI kit that allows you to plug in the joystick and the MIDI device simultaneously.

Telephone Answering Device/Modem connector

Connects a voice modem to transmit and receive audio signals.



CD Audio connector

Connects a CD-ROM drive using an MPC-3 CD audio cable.

AUX connector

Connects a TV card or second CD-ROM drive.

Figure 1: Jacks and connectors on your audio card.

To Install the Card and Related Hardware

1. Switch off your system and all peripheral devices, and then touch a metal plate on your computer to discharge any static electricity.
2. Unplug the power cord from the wall outlet.
3. Remove the cover of your computer to expose the motherboard and PCI slots.
4. Find an available PCI slot. Remove the cover plate at the back of the computer to create an opening for the audio card's jacks. Place the screw aside for later use.
5. Align your card's 32-bit slot connector with the expansion slot and press the card into the slot gently and evenly, with the external jacks facing the outside of the computer. Ensure that the bus connector has been pressed in as far as it will go and is sitting firmly inside the expansion slot.

To Install Software in Windows 95/98

6. Plug the CD-ROM audio cable into the CD Audio connector and plug the speakers into the Front Line Out/Speaker Out jack (see Figure 1). Make any other internal connections applicable for your computer, including modem or video card connections.
7. Replace the computer cover and plug all components back into their respective outlets. You may now start the computer.

- ☐ To Install Audio Drivers
 - For Windows 95 Version (4.00.950/A)
 - For Windows 95 Version (4.00.950B/C)
 - For Windows 98
- ☐ To Install Applications
- ☐ To Test the Installation
- ☐ To Uninstall Sound Blaster 16 PCI

Note: When you start your computer after installing the audio card, Windows 95/98 automatically detects the audio card installed in your computer.

To Install Audio Drivers

For Windows 95 Version (4.00.950/A)

1. In the audio card's New Hardware Found dialog box, select the Driver From Disk Provided By Hardware Manufacturer option and click the OK button.
2. Insert the installation CD into the CD-ROM drive.
3. In the Install From Disk dialog box, type **D:\AUDIO\Language\WIN95DRV** (where D: represents your CD-ROM drive and *Language* represents the language of the software that you want to install) and then click the OK button.
4. Follow the instructions on the screen to complete the audio driver installation.

For Windows 95 Version (4.00.950B/C)

1. Insert the installation CD into the CD-ROM drive.
2. In the Update Device Driver Wizard dialog box, click the Next button.
3. Click the Other Locations option.
4. Type the path or click the Browse button to select the path of the drivers' location (that is, **D:\AUDIO\Language\WIN95DRV**, where D: represents your CD-ROM drive and *Language* represents the language of the software that you want to install) and then click the OK button.
5. Click the Finish button.
If the system prompts you for the installation CD again, click the OK button and repeat from Step 4.
The audio drivers are copied to your system.

For Windows 98

1. Insert the Sound Blaster 16 PCI installation CD and click the Next button.
2. Select the Search For The Best Driver For Your Device (Recommended) option and click the Next button.
3. Clear all check boxes and check only the Specify a Location check box. Type or click the Browse button and point to the path of the drivers' location (that is, **D:\AUDIO\Language\WIN95DRV**, where D: represents your CD-ROM drive and *Language* represents the language of the software that you want to install) and click the Next button.
4. Click the Next button to install the Windows 98 drivers.
5. Click the Finish button to complete the installation.

To Install Applications

1. Insert the installation CD into the CD-ROM drive
2. The Sound Blaster 16 PCI installation screen will appear. Otherwise, double-click the My Computer icon on your Windows Desktop, then double-click on your CD-ROM drive icon.
3. Select the applications you want to install and click the OK button.
4. Follow the instructions on screen to complete the installation.
5. Restart your system when prompted.

To Test the Installation

After the drivers are installed, you can use Windows 95/98 Media Player to test whether your audio card is working properly.

1. Click the Start button, point to Programs, point to Accessories, point to Multimedia (for Windows 98, choose Entertainment), and then click Media Player.

The Media Player appears as shown in Figure 2.

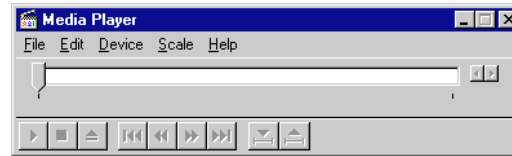


Figure 2: The Media Player Interface

2. On the Device menu, click Sound.
3. In the Open dialog box, select a sound file from the list, and then click the Open button.
4. On the Media Player, click the Play button. You should hear the selected sound being played. If you encounter any problems, consult the "Troubleshooting in Windows 95/98" section of the online *Creative Audio Software User's Guide*.

To install Media Player

If you do not have Windows 95/98 Media Player, follow these steps to install it.

1. Click the Start button, point to Settings, and then click Control Panel.
2. In the Control Panel window, double-click the Add/Remove Program icon.
3. Click the Windows Setup tab.
4. Select the Multimedia check box, and then click the Details button.
5. In the Multimedia dialog box, select the Media Player check box, and then click the OK button.
6. Follow the instructions on the screen to complete the installation.

To Uninstall Sound Blaster 16 PCI

1. Click the Start menu, point to Settings and click Control Panel.
2. Double-click the Add/Remove Programs icon.
3. On the Install/Uninstall tabbed page, select Sound Blaster 16 PCI.
4. Click the Add/Remove button, and then click the Yes button when prompted to remove the software.

To Install Software in Windows NT 4.0

- ☐ To Install Audio Drivers
- ☐ To Test the Installation
- ☐ To Uninstall Sound Blaster 16 PCI
- ☐ To Reinstall the Audio Drivers From the Installation Disc
- ☐ A Windows NT 4.0 Service Control Manager error message appears...

To Install Audio Drivers

1. Insert the installation CD into your CD-ROM drive.
The installation screen appears.
2. Follow the instructions on the screen to complete the installation.

To Test the Installation

You may run a simple application to test the card's MIDI and Wave sound playback. This ensures that the card is properly installed and that there are no conflicts in the IRQ, DMA, or I/O settings.

1. In the Start menu, point to Programs, point to Accessories, point to Multimedia, and then click Media Player.
2. On the File menu, click Open.
3. Browse to any folder that contains a file with the extension .WAV. Select the file and click the Open button. Click the Play button to play the file.

To Uninstall Sound Blaster 16 PCI

1. Click the Start button, point to Settings and click Control Panel. Double-click the Multimedia icon.
2. From the Audio Devices tabbed page, select any existing audio devices and then click Remove. Click Yes when prompted to remove the driver.
3. Close the Multimedia Properties window and restart your computer.

To Reinstall the Audio Drivers From the Installation Disc

If you think the audio drivers are corrupt, follow these steps to reinstall them.

1. Insert the installation CD into your CD-ROM drive.
2. Run the UPDPCINT.EXE program from the **D:\AUDIO\Language\NT4DRV** folder, where D: represents your CD-ROM drive and *Language* represents the language of the software that you want to install.
A brief message appears. Then the pointer returns to its normal shape, indicating that the update is complete.

A Windows NT 4.0 Service Control Manager error message appears...

If one or more error messages appear at system restart, it is because you removed an audio card from your computer after you have successfully installed the Sound Blaster 16 PCI card. The drivers of the removed audio card cannot locate the card in your system.

To solve this problem:

1. Log on to your computer as Administrator.
2. Click the Start button, point to Settings, and then click Control Panel.
3. Double-click the Multimedia icon, and then click the Devices tab.
4. In the list, under these entries
 - ☐ Audio Devices
 - ☐ MIDI Devices And Instrumentsremove all items except:
 - Audio for Sound Blaster 16 PCI
 - MIDI for Sound Blaster 16 PCI

5. Click the OK button to close the dialog box.
The drivers are removed.

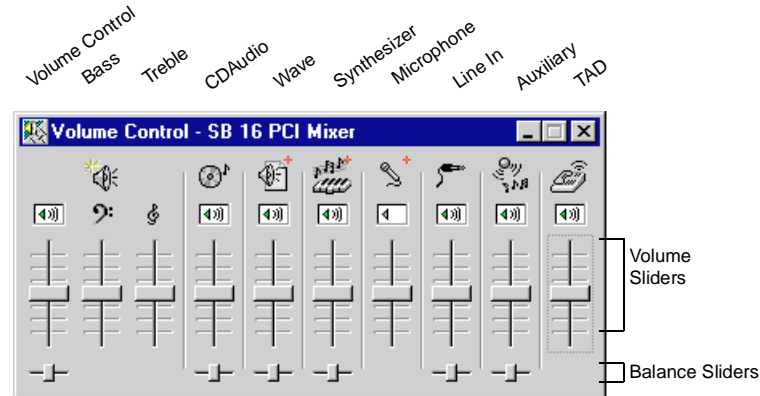
Applications

The Sound Blaster 16 PCI card is supported by a range of applications to help you get the absolute most from the audio card. Some of the more important applications are:

- ☐ Creative Mixer
- ☐ Creative WaveStudio
- ☐ Soundo'LE
- ☐ Creative Keytar

Creative Mixer

Creative Mixer allows you to control, combine, and manipulate sound from various audio sources. You can control the volume of an audio source while running other Windows applications, and select and mix different audio sources during playback and recording.



See the online help file for instructions on

- ☐ Basic tasks
- ☐ Customizing the view
- ☐ Using advanced controls
- ☐ Mixing, Recording and Playback, recording from a single and multiple sources and creating effects

Creative WaveStudio

WaveStudio is a Windows-based application that allows you to perform the following sound editing functions easily:

- ☐ Play, edit, and record 8-bit (tape quality) and 16-bit (CD quality) Wave data. Enhance your Wave data or create unique sounds with various special effects and editing operations such as rap, reverse, echo, mute, pan, cut, copy, and paste.
- ☐ Open and edit several Wave files at the same time.
- ☐ Import and export raw (.RAW) data files.

See the online help file for details.

Soundo'LE (for Windows 95/ 98 only)

Creative Soundo'LE plays and records Wave (.WAV) data, and supports Object Linking and Embedding (OLE) 2.0. In the online help file, learn to:

- ☐ Work with Wave files
- ☐ Embed a Wave file

Creative Keytar

With Creative Keytar, an easy-to-use and highly interactive education and entertainment software for beginners, you can turn your multimedia computer into a virtual rhythm guitar system immediately. Click a picture at the top of the screen to choose your favorite guitar. Press a function key (F1, ..., F12) to activate a chord, and you can start strumming or plucking your favorite tune, all in a matter of seconds or minutes.

General Specifications

Wave-table Synthesis

- ☐ Creative synthesis engine
- ☐ Digital effects engine for reverb and chorus
- ☐ 128-voice polyphony and multi-timbral capability
- ☐ 16 MIDI channels, 128 GM and GS compatible instruments and 10 drum kits
- ☐ MT-32 compatible instrument set
- ☐ 2MB, 4MB and 8MB sample sets included

3D Audio Technology

- ☐ Support for Microsoft DirectSound and DirectSound3D and Creative Environmental Audio Extensions (EAX) audio technologies in two-speaker mode
- ☐ Localized 3D Sound technology expands the spaciousness of sounds in the traditional two speaker system
- ☐ Multi-Algorithm reverb and chorus

Memory Subsystem

- ☐ Utilizes system RAM for wave-table samples
- ☐ User configurable for 2MB, 4MB or 8MB

CD-Quality, 16-Bit Stereo Digital Audio

- ☐ 8-bit and 16-bit mono and stereo recording and playback
- ☐ User-selectable sample rates from 5 kHz to 48 kHz
- ☐ Full-duplex support enables simultaneous record and playback for Internet communications software

MIDI Interface/ Joystick Port

- ☐ Built-in 15-pin MIDI interface (cable available separately)
- ☐ Compatible with Sound Blaster and MPU-401 UART modes
- ☐ IBM-compatible 15-pin joystick port with analog support

On Board Connectors

- ☐ Line In
- ☐ Microphone In
- ☐ Line Out
- ☐ Speaker Out
- ☐ MIDI/Joystick port
- ☐ Telephone Answering Device In/Out
- ☐ MPC-3 CD Audio In
- ☐ Auxiliary In

Works With The Following Standards

- ☐ Windows 95/98
- ☐ Windows NT 4.0
- ☐ General MIDI
- ☐ MPC-3
- ☐ Plug-and-Play
- ☐ Sound Blaster PCI
- ☐ Microsoft DirectSound, DirectSound3D
- ☐ Creative EAX